

New concept cars

(Continued from page 1.)

Advanced electric vehicles such as General Motors' EV1 make use of nickel-metal hydride batteries developed with OTT/PNGV support. These advanced batteries provide double the range of incumbent lead-acid batteries, with zero emissions.

Hybrid technology is a major thrust of OTT/PNGV programs, and vehicles such as the Chrysler ESX2, developed as part of an OTT/PNGV hybrid propulsion program, made a major impression at this year's NAIAS. The vehicle can achieve 70 mpg, and utilizes a lightweight, quiet and durable direct injection diesel engine.

Several concept cars also featured OTT/PNGV-funded advanced fuel cell

technologies that will enable the use of this high efficiency, zero-emission power source.

PNGV partners will continue to refine these concepts and combine technologies to achieve the ultimate 80-mpg prototype vehicle, which is scheduled to be unveiled in 2004. For example, PNGV R&D efforts may utilize the lightweight P2000 as a test platform for many hybrid electric propulsion systems currently in development. In this way, the diverse partners can build upon each others' expertise, an unprecedented factor that has helped make the PNGV effort successful.

New children's book

(Continued from page 3.)

All readers of the OTT Times are strongly encourage to read *Daniel and His Electric Car* to their kids, or even to their kid's school classes. Passing a copy along to your child's elementary school teacher is also encouraged. For your free copy or copies, contact the Editor.

COMING EVENTS

March 18-19, 1998  
Fuel Cells for Transportation (TOPTEC)

Cambridge, MA  
For more information about this event, call SAE at 412-772-7148.

April 6-7, 1998  
Society of Automotive Engineers Government/Industry meeting

Washington, DC  
For more information about this event, call SAE at 412-772-7148.

April 28-29, 1998  
The Suppliers of Advanced Composite Materials Association Spring Meeting

Arlington, VA  
For more information about this event, call 703-841-1556.

May 3-4, 1998  
NAFA's 41st Annual Fleet Institute Exposition

Seattle, WA  
For more information about this event, call NAFA at 732-494-8100.

May 9-15, 1998  
Tour de Sol

New York, NY  
For more information about this event, call Nancy Hazard, NESEA, at 413-774-6051.

May 10-15, 1998  
Community Transportation Association of America Expo '98

Albuquerque, NM  
For more information about this event, call 1-800-788-7077.

May 31-June 3, 1998  
4th National Clean Cities' Stakeholders Conference & Exposition

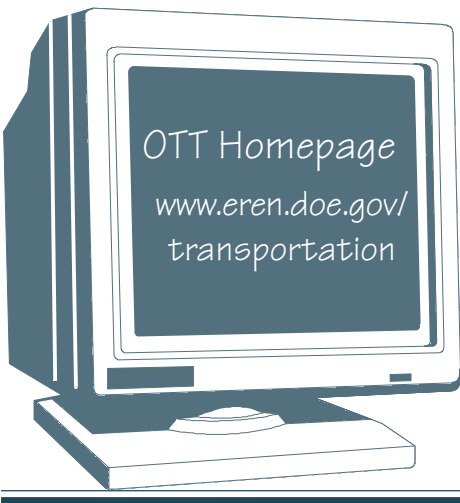
Washington, DC  
For more information about this event, call 1-800-CCITIES.

June 4-11, 1998  
1998 FutureCar Challenge

Auburn Hills, MI  
For more information about this event, call Shelley Launey at 202-586-1573.

Don't Forget!

The OTT Times is now available online. Please visit our website, accessible through the Energy Efficiency and Renewable Energy Network.



Times

Volume Seven  
Issue One  
Winter 1998

UNITED STATES DEPARTMENT OF ENERGY • ENERGY EFFICIENCY AND RENEWABLE ENERGY

On The Move

Dear Reader:

This is an especially exciting time for OTT, the auto industry and anyone whose life is impacted by the automobile—and that's just about all of us. While nearly every new vehicle model year has seen evolutionary changes from the Big Three automakers, recent years have seen some inarguably revolutionary changes. There are now showroom vehicles for regular commercial sale that don't run on gasoline. Think about it—this would have sounded like science fiction just five years ago, but here are regular production vehicles running on electricity and natural gas. Cars that with every mile are helping to reduce America's dependence on foreign oil and decrease the air pollution burden on our environment. In addition, the auto shows are presenting the next generation in concept cars, featuring new technologies that will turn the tide even more strongly in a positive direction.

And the news gets even better: it looks as if there will soon be some significant tax incentives to help get people into these new vehicles in the shorter term. As President Clinton recently announced, the Federal Government is planning to offer tax credits for "high fuel economy vehicles" including those running on alternative fuels. The Treasury Department is finalizing the details.

OTT is proud of the role our long-standing R&D programs, as well as outreach and education programs, have played in this continuing "roll-out" of better automotive transportation. And, we take great pride in our more recent

Big Three automakers unveil concept cars, many featuring technologies developed by OTT/PNGV

Prototypes of cleaner, more efficient "vehicles of the future" were unveiled at the 1998 North American International Auto Show (NAIAS) in January. Many of them featuring state-

displayed at NAIAS, a major staging event for industry news and innovation, demonstrated many of the technologies that could be used to enable the achievement of this aggressive goal.



General Motors' EV1 makes use of nickel-metal hydride batteries developed with OTT/PNGV support.

of-the-art engine, propulsion, sensor, and materials technologies developed in conjunction with OTT and its colleagues in the Partnership for a New Generation of Vehicles (PNGV) initiative.

As readers of OTT Times know, PNGV is an unprecedented effort bringing together the Departments of Energy, Commerce, Transportation, and several other federal agencies, as well as the Big Three auto industry, banding together to create a six passenger family sedan that operates at 80-mpg. This vehicle would not sacrifice comfort, convenience, safety or performance, and would be at a comparable cost to today's vehicle. The vehicles

For example, Ford's P2000, developed with OTT/PNGV, makes extensive use of lightweight aluminum to achieve a curbweight 40% less than that of a Taurus, a feature that helps this mid-sized vehicle deliver 63-mpg performance.

(Continued on page 4.)

INSIDE THIS ISSUE

- 2 A report from CFDC
- 3 New children's book
- 3 Paulette Hudson profile
- 4 Coming events

(Continued on page 2.)



## A Report From: *The Clean Fuels Development Coalition*



The Clean Fuels Development Coalition (CFDC) actively supports the development and production of fuels with the demonstrated ability to reduce air pollution, as well as help reduce American dependence on fossil fuels in general and imported oil in particular.

The CFDC is supportive of all fuels that meet these goals, but, since its founding, this non-profit organization has elected to focus its resources primarily on renewable alcohols and their ether derivatives, especially as petroleum-replacing additives in reformulated gasoline.

Working closely with its members, the CFDC has achieved substantial success in developing new components of our country's evolving energy and environmental strategy. Among its key successes, CFDC helped:

- draft and support the oxygenated fuels, reformulated gasoline and "deposit control additives" provisions in the Clean Air Act;
- helped extend the excise tax exemption and the blender tax credit for ethanol through the year 2000; and
- organized the campaign to obtain IRS clarification regarding ethanol's eligibility for blender tax credits when manufacturing ETBE.

In addition, CFDC has a strong educational component to its efforts, publishing print materials, testifying to Congress and federal agencies, and appearing in the media to provide information on the benefits of reformulated gasoline oxygenated fuels, and alternative fuels.

Driving the CFDC's success is its ability to find common ground and build alliances among diverse industry partners with sometimes conflicting interests. CFDC members include ethanol manufacturers and marketers, petroleum refiners and marketers, gasoline additive manufacturers, American automakers, agricultural organizations, state agencies, and engineering firms. The CFDC recently celebrated their 10-year anniversary.

For more information on the efforts of the Clean Fuels Development Coalition, contact Doug Durante, Executive Director, CFDC, 1925 North Lynn Street, Suite 725 Waterview, Arlington, VA 22209. 703-276-CFDC (2332).

*"Association News" is presented as a forum for the featured transportation-related trade association, and is written based on facts provided by the Association. OTT does not independently verify claims made by the association, and the column does not necessarily reflect the office's beliefs or opinions. If you would like to find out more about how your association can be featured, contact the Editor.*

### On The Move

(Continued from page 1.)

role as a member of PNGV, which brings together about a dozen different federal agencies, the auto manufacturers, and their suppliers in a highly diverse partnership to develop an advanced vehicle. The grouping is unprecedented in its scope, and has proven to be a fertile ground for innovation, as well as practical commercial triumphs.

We're looking forward to reporting many more achievements throughout 1998 and beyond, as the hard work of OTT and its partners—innovators like you—demonstrates more and more "pay off" for the American people, the economy and the environment. Keep up the good work!

Until next time—

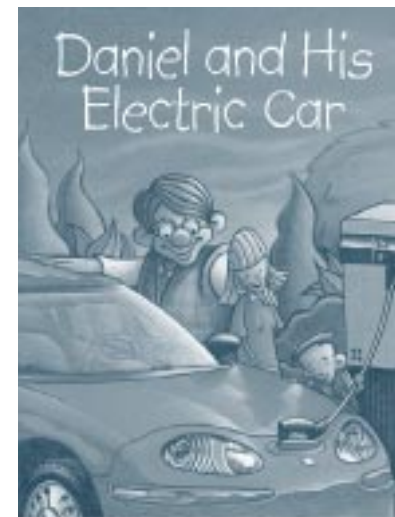
Ann Hegnauer

## New children's book delights youngsters all across the country

General Motors has taken OTT's children's story *Daniel and His Electric Car*, written by Ann Hegnauer, from its place on the world wide web to formally publishing it as a full-fledged children's book.

The colorfully presented story features a five-year old boy who goes car shopping with his parents, and, upon learning the benefits, helps choose to purchase a new electric vehicle as their family's second car.

Many DOE people, including Secretary Peña, have read the story to school age children at home, in libraries and in the classroom, and have reported being overwhelmed by the enthusiastic response, as well as by the enormous curiosity of the youngsters regarding this new and exciting technology.



"The book is just one way that OTT is working to educate students and children of all ages about the benefits of alternative fuels and vehicles," says Ann Hegnauer, editor of the *OTT Times*. "It's a vital part of our outreach efforts, as we recognize that these students will be our 'customers' of the future, and likely the first generation to make everyday use of cleaner, non-petroleum vehicles a reality."

The popularity of the Daniel character is leading Ann to consider producing a series of books featuring the forward-thinking young protagonist. The next one planned will feature ethanol, with the story centering around Daniel's visit to his uncle, a farmer proudly growing corn that can be turned into cleaner fuel for his tractor and car.

(Continued on page 4.)

## Paulette Hudson: when it comes to outreach, she's a natural



Paulette Hudson

If you've recently called in to OTT's Office of Technology Utilization (OTU), that friendly, enthusiastic voice answering the phone probably belonged to Paulette Hudson.

As a member of the OTU team, Paulette provides vital administrative support, helping answer inquiries via letter, phone and e-mail; managing the sensitivities of controlled correspondence; and facilitating hectic office schedules.

But Paulette is also a member of another team—the OTT Outreach Team. In this capacity she uses her outgoing personality to help plan and implement various outreach activities for the office.

Described by a co-worker as a "real bright light—always with a smile and a willingness to help," it's easy to see how Paulette is one of OTT's "secret weapons" at many events. At a recent exhibit in Los Angeles, Paulette engaged passersby in friendly conversation and did her best to get more people to visit the OTT booth. Although not an engineer by training, she is well-versed in the features and the benefits of many advanced automotive technologies, and is able to intrigue passersby before "turning them over" to a technical person for additional discussion.

"I really love getting out and meeting people, especially at exciting, fast-moving trade events," said Paulette. "Often, I'll be talking to a passing customer and we'll realize that we've spoken over the phone many times before, so they're like an old friend."

As part of OTT's Outreach Team, Paulette is using her skills to help make the Office's vital external communications efforts more successful. She helps to ensure that the OTT Communications Plan is implemented in her own office, creates slide presentations for the staff, schedules and

helps to coordinate events; and staffs the OTT exhibit at various trade shows. In addition, she works with her teammates to help stimulate "outreach" within OTT, by establishing more social/business events giving OTTers more opportunities to interact informally with each other.

In her spare time, Paulette enjoys the theater, and recent theater going experiences might have presented her with a possible new direction in her work life as well. At not one, but two plays she attended, her apt interest led to her being chosen as an "audience volunteer." Once on stage, Paulette was excited to discover that her easy-going, friendly style really charmed the audiences.

Paulette plans to hone this natural stage presence through participation in the local Toastmasters program, and looks forward to new opportunities to promote the aims and successes of OTT to new audiences in new ways.

"My dream job is one that would allow me to meet with as many people as possible and talk up the great work our people are doing in this Office," she said. "I think I can help get our message out there, and make even greater contributions."



U.S. Department of Energy  
Energy Efficiency and Renewable Energy  
Office of Transportation Technologies  
<http://www.eren.doe.gov/transportation>

Published quarterly in Washington, D.C. by the Office of Transportation Technologies (OTT). The content of this periodical is reprintable without permission.

Thomas J. Gross  
Deputy Assistant Secretary, OTT

Ann Hegnauer  
Manager, Technology Transfer, OTT

Correspondence concerning this periodical, including requests for additional copies, or to be added to the mailing list, may be directed to:

Ann Hegnauer, EE-30  
Room 5F-034  
Forrestal Building  
1000 Independence Ave., SW  
Washington, DC 20585  
Telephone (202) 586-8014  
Fax (202) 586-1637